



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/810,139

03/26/2004

Larry Steven Foster

2002-0856.02

8845

21972

7590

07/12/2005

LEXMARK INTERNATIONAL, INC.
INTELLECTUAL PROPERTY LAW DEPARTMENT
740 WEST NEW CIRCLE ROAD
BLDG. 082-1
LEXINGTON, KY 40550-0999

EXAMINER

VARGAS, DIXOMARA

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,139

Applicant(s)

FOSTER ET AL.

Examiner

Dixomara Vargas

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>05/26/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: #73, #94 and #96. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "#46" and "#47" have both been used to designate retraction plate. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

Art Unit: 2859

informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 7-22, 24-27 and 29-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Sameshima et al. (US 6,453,135 B1).

With respect to claim 1, Sameshima discloses an image forming apparatus (Figures 1-2; #A), comprising: a plurality of rollers, disposed with generally parallel axes (#1, #2 and #4); a retraction plate movable between engaged and retracted positions (#5 in #41); and a plurality of rotational couplings moved by said retraction plate (#12, #13, #14 and #15), each said rotational coupling operative to transmit a rotary force to one of said rollers when said retraction plate is in said engaged position (Figure 2), whereby said couplings move laterally in an axial direction of said rollers as said retraction plate moves between said engaged and retracted positions (Figures 12, 13 and 15).

5. With respect to claims 2 and 25, Sameshima discloses said rollers comprise at least one photoconductive member (#1a-#1d).

6. With respect to claims 3 and 24, Sameshima discloses said rollers comprise at least one developer member (#4a-#4d).

Art Unit: 2859

7. With respect to claims 4 and 15, Sameshima discloses said rollers comprise at least one removable cartridge including both a developer member and a photoconductive member (cartridge #7a-#7d having PC drums #1 and developer #4).

8. With respect to claim 5, Sameshima discloses said rollers comprise at least one pair of removable cartridges (Figure 2 showing the cartridge 7b being removed), one said cartridge including a developer member (cartridge 7b includes developer #4b) and the other said cartridge (#7a) including a photoconductive member (#1a).

9. With respect to claims 7, 8, 13, 14, 26, 27 and 29, Sameshima discloses said retraction plate moves between said engaged and retracted positions in response to an applied force wherein said applied force is generated by a user opening a portion of said image forming apparatus (Column 4, lines 41-65; Figures 2 and 12-15).

10. With respect to claims 9, 10, 31, 32, 35 and 36, Sameshima discloses said retraction plate pivots about a pivoting axis to move between said engaged and retracted positions wherein said pivoting axis is disposed along one edge of said retraction plate (Figures 2 and 12-15).

11. With respect to claim 11, Sameshima discloses said retraction plate moves laterally between said engaged and retracted positions, in the axial direction of said rollers (Figures 2 and 12-15).

12. With respect to claims 12, 16 and 30, see rejection of claims 1 and 9-11 above.

13. With respect to claim 17, Sameshima discloses said retraction plate is disposed in a generally vertical orientation (Figures 2 and 12-15).

14. With respect to claim 18, Sameshima discloses said articulating member (Figures 9-11, #58 and #60) includes at least one pin (66a).

Art Unit: 2859

15. With respect to claim 19, Sameshima discloses a fixed bracket (#44, #45 and #46), and wherein said articulating member is constrained to motion in said first lateral direction by engaging said at least one pin in a slot in said fixed bracket, said slot oriented along said first lateral direction (Figures 10 and 11).

16. With respect to claims 20, 21 and 33, Sameshima discloses said retraction plate is translated in said second lateral direction by engaging said at least one pin with a cam surface attached to said retraction plate, said cam surface orientated at a non-zero, acute angle with respect to said first lateral direction generally less than 45-degree angle with respect to said first lateral direction (Column 5, lines 17-67).

17. With respect to claim 22, Sameshima discloses a retraction plate bracket affixed to said retraction plate, and wherein said cam surface is an inner surface of a slot formed in said retraction plate bracket (Column 5, lines 17-67).

18. With respect to claim 34, see rejection of claims 1-5 above.

19. With respect to claims 37-40, see rejection of claims 18-22 above.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

Art Unit: 2859

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

22. Claims 6 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sameshima et al. (US 6,453,135 B1) in view of Merrifield et al. (US 6,246,841 B1).

With respect to claims 6 and 23, Sameshima discloses the claimed invention as stated above in paragraph 4 except for the rotational couplings being Oldham couplers. However, Merrifield discloses the Oldham couplers (Column 6, lines 43-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Merrifield's Oldham couplers with Sameshima's image forming apparatus for the purpose of rotatably driving the developer roll as shown by Merrifield (Column 6, lines 43-46).

23. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sameshima et al. (US 6,453,135 B1) in view of Morita et al. (US 5,262,824).

Sameshima discloses the claimed invention as stated above in paragraph 4 except for having said rotary force converted to a lateral force by a rack and pinion gear system. However, Morita discloses rack and pinion gear system (Figure 3, #51 and P). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use

Art Unit: 2859

Morita's rack and pinion gear system with Sameshima's image forming apparatus for the purpose of changing the position of the cartridge to replace it or remove it as shown by Morita (Column 18, lines 33-68).

Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional prior art cited discloses imaging systems with means for opening the cover.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dixomara Vargas whose telephone number is (571) 272-2252. The examiner can normally be reached on Monday to Thursday from 8:00 am. to 4:30 pm..

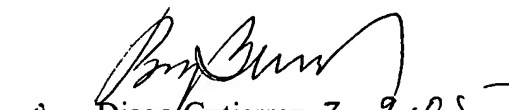
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2859

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dixomara Vargas
Art Unit 2859
July 8, 2005


for Diego Gutierrez 7-9-05
Supervisory Patent Examiner
Technology Center 2800